

Temporal and benefactive *for*-phrases prime differently: Evidence against phrase structural accounts of persistence

Introduction

• Speakers tend to parallel linguistic structures in consecutive utterances (= Structural Persistence; Bock, 1986). This phenomenon is ascribed to priming of representations that are involved in sentence production.

Hypotheses:

- Priming of phrase structural representations (e.g., Bock & Loebell, 1990); for example, of ditrans. constructions (NP V NP PP vs. NP V NP NP)
- Priming of conceptual representations (e.g., Pappert & Pechmann, 2014); for example, of the linearization of thematic roles (theme before recipient or vice versa)
- We conducted a structural priming experiment in German to pin down the type of representation that gets primed.

Materials and Procedure



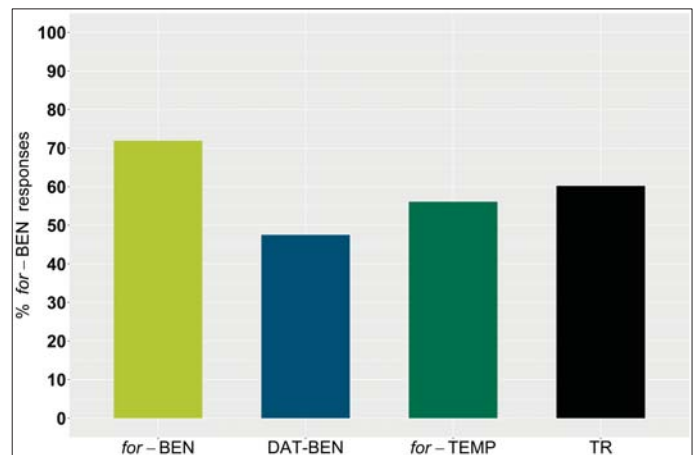
Primes:

<i>for</i> -BEN:	Der	Zirkusdirektor	öffnet	den	Vorhang	für	den	Clown.
	the.NOM	circus director	opens	the.ACC	curtain	for	the.ACC	clown
	'The circus director opens the curtain for the clown.'							
DAT-BEN:	Der	Zirkusdirektor	öffnet	dem	Clown	den	Vorhang.	
	the.NOM	circus director	opens	the.DAT	clown	the.ACC	curtain	
	'The circus director opens the clown the curtain.'							
<i>for</i> -TEMP:	Der	Zirkusdirektor	öffnet	den	Vorhang	für	zehn	Sekunden.
	the.NOM	circus director	opens	the.ACC	curtain	for	ten	seconds
	'The circus director opens the curtain for ten seconds.'							
TR:	Der	Zirkusdirektor	öffnet	den	Vorhang.			
	the.NOM	circus director	opens	the.ACC	curtain			
	'The circus director opens the curtain.'							

Target: mieten ('rent') Regisseur ('director') Strandhaus ('beach house') / Filmstar ('movie star')

↓
Target Noun Order varied

Results



Percentages of *for*-BEN (vs. DAT-BEN) responses per Prime Structure.

- N_{valid} = 559 (59% *for*-BEN), 24 items, 48 participants
- GLMMs on *for*-BEN (vs. DAT-BEN) responses

- main effects of Prime Structure and Target Noun Order; no interaction

Comparisons of factor levels for Prime Structure:

<i>for</i>-BEN	≠ DAT-BEN	(<i>p</i> < .001)
<i>for</i>-BEN	≠ <i>for</i> -TEMP	(<i>p</i> < .01)
<i>for</i>-BEN	≠ TR	(<i>p</i> < .01)
DAT-BEN	≠ <i>for</i> -TEMP	(<i>p</i> = .03)
DAT-BEN	≠ TR	(<i>p</i> = .02)
<i>for</i>-TEMP	= TR	(<i>p</i> = .89)

Discussion

- Participants showed structural persistence in benefactives but they did not parallel *for*-temporals and *for*-benefactives, although those are superficially identical in phrase structure.
- There was no evidence for the additivity of conceptual level and phrase structural priming.
- Thus, the findings speak against an account of structural persistence that relies on priming of phrase structural representations (e.g., Bock & Loebell, 1990; Pickering & Branigan, 1998).
- Approaches are supported that suggest priming at the conceptual level or of the subsequent procedural representations that map conceptual categories to syntactic structure (Pappert & Pechmann, 2014; Baumann, Pappert & Pechmann, submitted).
- In addition, the outcome highlights a division between meaning- and form-related mechanisms in sentence production (cf., Bock et al., 1992).

References

Baumann, M., Pappert, S., & Pechmann, T. (submitted). Evidence against lexicalist or configurational approaches to structural encoding in sentence production.

Bock, J. K. (1986). Syntactic persistence in language production. *Cognitive Psychology*, 18(3), 355–387. doi:10.1016/0010-0285(86)90004-6

Bock, J. K., & Loebell, H. (1990). Framing sentences. *Cognition*, 33(1), 1–39. doi:10.1016/0010-0277(90)90035-I

Bock, J. K., Loebell, H., & Morey, R. (1992). From conceptual roles to structural relations: Bridging the syntactic cleft. *Psychological Review*, 99(1), 150–171. https://doi.org/10.1037/0033-295X.99.1.150

Pappert, S., & Pechmann, T. (2014). Priming word order by thematic roles: No evidence for an additional involvement of phrase structure. *Quarterly Journal of Experimental Psychology*, 67(11), 2260–2278. doi:10.1080/17470218.2014.918632

Pickering, M. J., & Branigan, H. P. (1998). The representation of verbs: Evidence from syntactic priming in language production. *Journal of Memory and Language*, 39(4), 633–651. doi:10.1006/jmla.1998.2592